IEPC Programme

Monday

09.00
Welcome Speech
Audimax

09.30
David C. Byers Memorial Lecture
Audimax

10.00
Plenary Lecture
Audimax
Agencies

11.00
Plenary Lecture
Audimax
Industry

12.00
Lunch Break & Poster Session

14.00
Plenary Lecture
Audimax
European National Agencies

14.15
Poster Session

Material Technology
Cathodes, Gimbal
SR6
A299 The Effect of Neutral Gas Injection in the Keeper Oorption of a 25-A-class Hollow Cathode
S. Hall
A300 The Role of Neutral Pressure Due to Anode Geometry in Hollow Cathode Mode Transitions
S. Hall
A406 Development of a Diamond-Based Cold Cathode for Space Propulsion Applications
I. M. Ahmed Rudwan

Field Emission / Colloid Thrusters
SR5
A149 Development of Ionic Liquid Electrospray Thrusters with a Massive Emitter Array for Higher Thrust Density
Y. Takao
A173 Laboratory Demonstration of a Staging System for Electrospray Thrusters
G. Jia-Richards
A255 Colloid Micro-Thruster (CMT) Component Development Testing Towards Meeting USA Mission Requirements
H. Demmona
A255 Colloid Micro-Thruster (CMT) Component Development Testing Towards Meeting USA Mission Requirements
N. Dammora

Hall Thrusters 1
SR6
A129 Hybrid Data-Driven and Physics-Based Model for Plasma Turbulence in a Hall Effect Thruster
B. Jorna
A147 Modular Comprehensive Modeling of Plasma Behavior in Hall Thrusters
T. Andrusi
A204 Model for the Increase in Thruster Efficiency from Cross-Channel Coupling in Nested Hall Thrusters
L. Su
A218 Numerical study of microwave discharge ion thruster μ10
Y. Yamashita

Hall Thrusters 2
SR7
A329 Spatially Resolved Ion Velocity Distribution Measurements in the 12.5 kW HERMeS Hall Thruster
V. Chaplin
A310 Life-Time Evaluation of Microwave Discharge Neutralizer using Numerical Analysis
M. Moravek
A311 Ion Velocity Measurements in the Magnetically Shielded Miniature Hall Thruster (MaSMi) Using Laser-Induced Fluorescence
V. Chaplin
A353 Lifetime Evaluation of Microwave Discharge Neutralizer using Numerical Analysis
M. Moravek

Ion Thrusters
HS5
A154 Three-Dimensional Particle Simulations of Electron Extraction for a Miniature Microwave Discharge Neutralizer Using Water as the Propellant
Y. Sato
A156 Numerical Study of Microwave Discharge Ion Thruster
C. Jorda
A185 A Performance Comparison of Solid Propellants in a Surface Arc Thruster: Sulfur and Teflon
S. Shimhanda
A219 Characteristics of the Use of Electric Propulsion for Low Earth Orbit Satellites
D. Lev

Pulsed Plasma Thrusters
SR4
A184 The Modular Micro-Cathode Arc Thruster
S. Hurley
A186 A Performance Comparison of Solid Propellants in a Surface Arc Thruster: Sulfur and Teflon
S. Shimhanda
A273 A Coupled Inductively Energy Storage Power Processing Unit for Micro-Cathode Arc Thruster
J. Long
A292 Development of an additively manufactured mass, volume and cost optimised fuel tank for microsatellite propulsion systems MiniTank
A. Bani

Commercial Propulsion Needs
HS2
A303 Versatile Xenon Flow Controller for Extended Hall Effect Thruster Power Range
G. Legnulo
A505 New Propellant Approval at Apollo Fusion Inc.—Activities to Support Industry and Regulatory Approval of New Propellant
M. Haverty
A711 The Importance of Electric Propulsion to Future Exploration of the Solar System
J. Cassidy

Global Strategic Investments
SR8
J. Lopez Reig
A802 Evolution and Characteristics of the Use of Electric Propulsion for Low Earth Orbit Satellites
D. Lev
A803 The Importance of Electric Propulsion to Future Exploration of the Solar System
J. Cassidy

Innovative Concepts
HS3
A202 Performance Scaling of Drag-Modulated Plasma Aerocapture
C. Kelly
A254 Fluid-kinetic propulsive magnetic nozzle model in the fully-magnetized limit
M. Marino
A420 Theoretical scaling laws for water-vapor propellant thrusters
A. Sheppard